

**USEFUL FOR UNIVERSITY EXAMS, GATE,
NET AND OTHER CS EXAMS**

**TYPES OF
DATABASE
USERS**

**DATABASE
MANAGEMENT
SYSTEM**

**PROPER
NOTES
IN PPT
FORM**

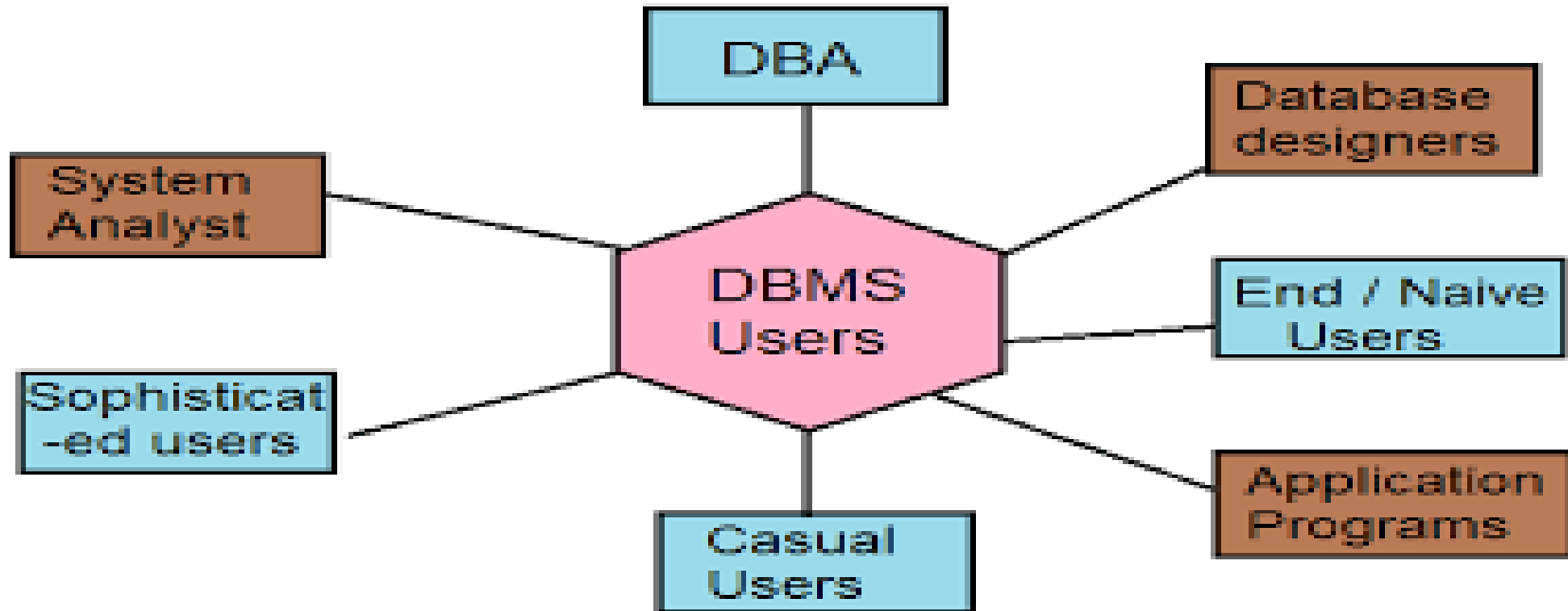
PART -3



DATABASE USERS

- ▶ Any person who uses the database and takes benefit from it is known as Database Users.
- ▶ Users interact with database according to their requirement and uses.
- ▶ They can be programmers, scientists, engineers, business person or an employee.
- ▶ The users can be classified into various categories depending upon their interaction and expertise of DBMS.
- ▶ There can be different users in a database, each with different level of privileges and permissions.

TYPES OF DATABASE USERS



1. DATABASE ADMINISTRATOR

- ▶ DBA is the database administrator, who controls and manages the database system.
- ▶ It can be a single person or a team.
- ▶ Every person who wants to access the database has to first take the permission from the DBA.
- ▶ DBA is responsible for ensuring data integrity, security of data, optimizing database performance and backing up and restoring the database.
- ▶ DBA has full control of the data stored in the database
- ▶ It has full control of those application programs which will access the database.
- ▶ DBA has all the privileges of the DBMS, so he can grant or revoke the privileges from the other database users.

RESPONSIBILITIES OF DBA

DBA is responsible for:

- ▶ Defining the Schema
- ▶ Grant and Revoke of access rights
- ▶ Deciding the schema structure at all the levels
- ▶ Managing database Users and Security
- ▶ Maintenance of Database
- ▶ Hardware and Software installation

2. DATABASE DESIGNER

- ▶ Database designers design the appropriate structure for the database.
- ▶ They are a specialized type of database user responsible for creating the conceptual and logical design of a database.
- ▶ They work closely with the DBA and application programmers to ensure the designing is what the DBA wants and it is feasible for the programmer to work on.
- ▶ Database designers define the data requirements for a database, create ER diagrams(Conceptual level model) and ensure optimal data structure for the database.

3. SYSTEM ANALYST

- ▶ The System Analyst is responsible for analyzing the system so that the efficiency of the database can be improved.
- ▶ They work closely with the other database users such as DBAs and developers so that they can understand the requirement and their needs.
- ▶ System analysts keep up to date with the latest technologies and recommend solutions that can improve performance of the database.
- ▶ They help to resolve issues that arise with the database, such as performance problems or data integrity issues.

4. APPLICATION DEVELOPER

- ▶ Application programmers are the computer professionals who write application program.
- ▶ They develop applications that help other users to interact with the database.
- ▶ They are responsible for creating a GUI apps for other naïve users.
- ▶ They need to have excellent knowledge of database and queries.
- ▶ They may specify certain modifications while coding for databases
- ▶ These programmers develop programs in C/ C++, Java, PHP, Python etc.

5. NAÏVE USERS

- ▶ They are also known as unsophisticated users, who have no knowledge of the database.
- ▶ They are like the layman, who has a very little bit knowledge of the database.
- ▶ They are the end users who work through the menu driven applications.
- ▶ These users interact with the database only with the help of the application interface.
- ▶ They are using the application without any detailed functioning knowledge.
- ▶ They get their desired result by working on the app.
- ▶ For eg: Railways ticket booking users are naïve users

6. SPECIALIZED USERS

- ▶ These users write a specialized queries in shell programming or batch programming to access the database.
- ▶ For eg in bank a cashier may write some queries related to his work.

7. Sophisticated Users

- ▶ These users normally do not use the application programs to access the database.
- ▶ They can directly interact with the database by using SQL queries.
- ▶ For eg: technicians know certain commands and they directly use those commands to access the database.

8. GUEST USER

- ▶ A guest user is a user who has limited access to the database, typically for read only purposes.
- ▶ This type of user may be used by external organizations or individuals who need access to a subset of the data in the database.

THANK YOU

